REMARKS

Applicants have amended Claim 2 for clarity herein. Enabling support for the amendments can be found in the application as filed (*See, e.g.*, original claims and page 7, lines 23-35). Therefore, no new matter is contained in the amendments. Reconsideration of the present application and allowance of pending Claims 2-17, 19, 21, and 23-24 are respectfully requested in view of the amendments and following remarks.

II. Rejections under 35 U.S.C. § 102

Claims 2-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hey *et al.* (EP 636704) (hereinafter "Hey") for reasons set forth in the previous Office Action. Applicants traverse the rejection as follows.

Applicants have amended Claim 2 to more clearly reflect that the Applicants' claimed process comprises a cyclic process which is divided into two phases. The first phase concerns the synthesis or production phase during which the precipitate ammonium salt is formed as a by-product, whereas the second phase is the regeneration phase during which the precipitate ammonium salt is heated to bring it into the gas phase. Applicants use of a cyclic process consisting of two phases allows for undesired by-products to be separated off while enabling the recirculation of valuable starting materials or intermediates which may still be present after the separation of the desired product or the undesired by-products. Unreacted starting materials thereby can be advantageously fed into the synthesis phase as a feed system (for example, page 9, lines 12-20).

Contrary to the Examiner's suggestion, Hey does not teach each and every limitation of Applicants' claimed invention. Specifically, Hey fails to teach – either explicitly or inherently – that it is intended and necessary that the ammonium salts formed are first separated off, i.e., precipitated, before they are brought into the gas phase. Although the Examiner previously seemed to acknowledge this distinction between Applicants' claimed invention and Hey (see Office Action dated March 24, 2008, page 2, paragraph 4), the Examiner now suggests that "the condensing and clogging of the conduits in the prior art is a separation process." (Office Action

dated September 5, 2008, page 2, paragraph 1). This interpretation seemingly disregards the express teachings of Hey that precipitation of the ammonium salt in the reactor should be avoided by heating the temperature of the gas conduits "so that substantially no condensate deposits in the gas conduits." (page 2, paragraph 0009). Thus, Hey clearly teaches that there should be no separation of the ammonium salt precipitate.

Hey also fails to inherently disclose that the ammonium salt precipitate which is formed as a by-product is retained within the reactor and thereafter heated to a temperature of ≥ 150°C to bring the ammonium salt into the gas phase. An anticipation rejection based on inherency requires that the elements of the claimed invention be a necessary and inevitable consequence of the prior art. Applicants respectfully submit that the Examiner has failed to show that the process taught by Hey necessarily provides for the precipitation of the ammonium chloride in-situ. Moreover, one skilled in the art would be just as likely to conclude from the teachings of Hey that by maintaining the process temperature sufficiently above the condensate temperature, the reaction bypasses or prevents the formation of the ammonium chloride precipitate altogether, producing only its molecular components. Thus, it is not a necessary and inevitable consequence of Hey that the ammonium salt precipitate in-situ and decompose when subsequently heated to a temperature ≥ 150°C.

Even if Hey were to inherently disclose that the ammonium salt precipitate is formed as a by-product in-situ, Hey still fails to remotely teach or suggest the desirability of retaining the ammonium chloride in its precipitate form throughout the duration of the synthesis phase and thereafter heating the reactor to a temperature of ≥ 150°C to bring the ammonium salt into the gas phase. Accordingly, Applicants respectfully request withdrawal of the claim rejections under 35 U.S.C. § 102(b).

III. Rejections under 35 U.S.C. § 103

Claims 2-17, 19, 21, and 23 were rejected under 35 U.S.C. § 103(a) as being obvious over Hey for the reasons set forth in the previous Office Action. Applicants respectfully traverse the rejections as follows.

One skilled in the art would not use the teachings of Hey to obtain Applicants' claimed processes. As described above, Applicants' Claim 2 of the present application is directed to a cyclic process which is divided into two phases. During the first phase of the process the ammonium salt precipitate is formed as a by-product while during the second phase of the process the ammonium salt precipitate is heated and brought into the gas phase. Hey, conversely, teaches continuous heating of the conduits of the reaction chamber in order to prevent the formation of ammonium salt. Thus, there is no teaching or suggestion by Hey that a heating step would be possible or advantageous at some point after the formation and retention of the ammonium salt precipitate, as is the case in the claimed processes. Rather, Hey simply teaches methods to prevent the ammonium salt precipitate from being formed at all.

Hey not only fails to teach regeneration of the reactor after the formation and retention of ammonium salt by-products within the reactor, but also fails to teach the necessity of retaining the ammonium salt precipitate within the reactor. Applicants' claimed processes advantageously allow for the separation of undesired by-products from the product by retaining the solid by-products within the reactor during the synthesis phase. This retention of the solid by-products assists in recirculating valuable starting materials or intermediates present in the gas phase back into the process. Unreacted starting materials thereby can be fed into the synthesis phase as a feed stream, and the ammonium salt precipitate can be discharged from the reactor by being transformed into a separate gaseous phase.

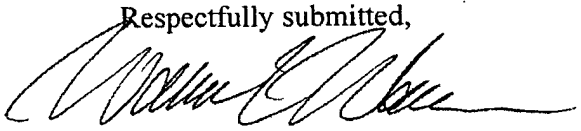
Hey does not teach or suggest the presently claimed methods or the advantages to be obtained thereby. Therefore, the rejection under 35 U.S.C. §§ 102(b) and 103(a) should be withdrawn.

CONCLUSION

Applicants believe that the present application, as amended, is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The foregoing is submitted as a full and complete response to the Office Action mailed September 5, 2008.

No fees are believed due at this time. However, please charge any fees that may be due, or credit any overpayment, to Deposit Account 19-5029 (Ref. No.: 18744-0029). In addition, if there are any issues that can be resolved by a telephone conference or an Examiner's amendment, the Examiner is invited and encouraged to call the undersigned attorney at (404) 853-8000.

Respectfully submitted,



William L. Warren
Reg. No. 36,714

SUTHERLAND ASBILL & BRENNAN LLP
999 Peachtree Street, NE
Atlanta, Georgia 30309-3996
(404) 853-8000
Our Docket: 18744-0029